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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,636	02/06/2002	Martin Greive	A-3222	8095

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EXAMINER

LIANG, LEONARD S

ART UNIT PAPER NUMBER

2853

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,636

Applicant(s)

GREIVE, MARTIN

Examiner

Leonard S Liang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration..
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

Oath/Declaration

The declaration is objected to because it has not been signed and dated by the inventor.
Appropriate correction is required

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 4, 7, and 8. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: On page 15, line 8, the specification designates printing heads as reference 5, while line 10 designates printing heads as reference 11. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

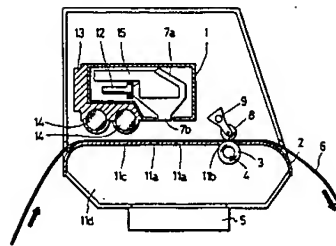
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Denda (US Pat 5124728).

Denda (US Pat 5124728)

- {claim 1} A device for holding a sheetlike article on a movable underlying surface (figure 1, references 2, 6; column 1, lines 44-51)

FIG. 1



comprising a member having a surface underlying the sheetlike article (figure 1, reference 2), the sheetlike article being retainable by pneumatic pressure (column 2, lines 6-12), a screening device (figure 1, reference 11a), the screening device serving for reducing an airflow in a region of the printing unit (column 2, lines 2-7)

- {claim 2} printing unit is an ink jet unit (column 1, lines 8-9)
- {claim 11} pneumatic pressure consists of negative pressure (column 1, lines 64-68; column 2, lines 1-5; negative pressure is inherent to invention)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denda (US Pat 5124728) in view of Wotton et al (US Pat 6394596).

Denda discloses, with respect to claims 3 and 10, a device for holding a sheetlike article on a movable underlying surface (as taught in claim 1 above).

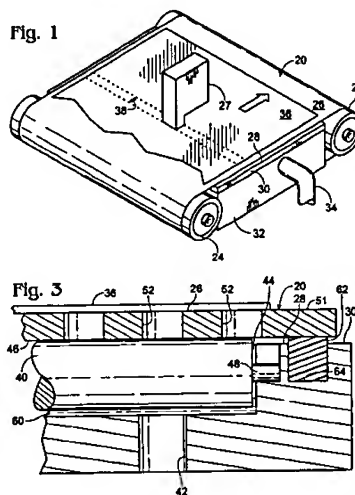
Denda differs from the claimed invention in that it does not disclose:

- {claim 3} movable belt
- {claim 10} continuous transport belt (figure 1, reference 20; column 2, lines 1-8) formed with holes (figure 3, references 20, 52)

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Wotton et al discloses:

- {claim 3} movable belt (figure 1, reference 20; column 2, lines 1-8) with through-passage holes (figure 3, references 20, 52). Wotton et al teaches that the belt is used to transport paper (column 2, lines 3-4)



- {claim 10} continuous transport belt (as taught in claim 3 above)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the continuous movable transport belt disclosed by Wotton et al into the invention of Denda. The motivation for the skilled artisan in doing so is to gain the benefit of being able to transport paper, as taught above.

Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denda (US Pat 5124728) in view of Yraceburu et al (US Pat 6409332).

Denda discloses, with respect to claims 4-9, a device for holding a sheetlike article on a movable underlying surface (as taught in claim 1 above).

Denda differs from the claimed invention in that it does not disclose:

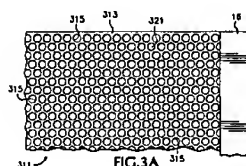
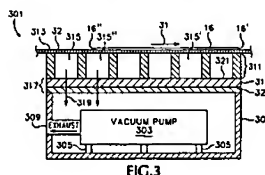
- {claim 4} screening device has sheet-like mesh
- {claim 5} first suction chamber
- {claim 6} further suction chambers
- {claim 7} mesh is disposed beneath cover plate
- {claim 8} mesh is connected to cover plate

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- {claim 9} connection of the mesh to the cover plate is a connection selected from the group consisting of integral and releasable connections

Yraceburu et al discloses:

- {claim 4} sheet-like mesh (figure 3A), the holes of the mesh being of the number and size that there is an adequate reduction in the airflow (abstract; column 2, lines 60-64). Yraceburu teaches that the invention “provides a low flow vacuum system with minimal airflow induced ink drop directionality errors (column 3, lines 17-18)



- {claim 5} first suction chamber connected to a negative pressure source (figure 3, reference 315; column 2, lines 48-49; column 5, lines 26-27).
- {claim 6} further suction chambers (figure 3, references 315', 315'') In view of the teachings of Denda (column 2, lines 2-7), it is inherent that further suction chambers have a greater negative pressure than the first suction chamber, which is disposed beneath the region of the printing unit.
- {claim 7} mesh is disposed beneath the cover plate (figure 3, references 311, 313)
- {claim 8} mesh is connected to the cover plate (Figure 3, References 311, 313)
- {claim 9} connection of the mesh to the cover plate is an integral connection (figure 3A)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Yraceburu et al into the invention of Denda so that the screening device has a sheet-like mesh; first suction chamber; further suction chambers; mesh is disposed beneath the cover plate; mesh is connected to the cover plate; and the connection of the mesh to the cover plate is a connection selected from the group consisting of integral connections. The motivation for the skilled artisan in doing so is to gain the benefit of providing a low flow vacuum system with minimal airflow induced ink drop directionality errors, as taught above.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Esposito (US Pat 5505124) discloses a printing press with a device for providing a suction force.

Miyasaka et al (US Pat 6270215) discloses an inkjet printer.

Yamada et al (US Pat 6038776) discloses an automatic drafting machine.

Uchimura (JP Pat 06055731A) discloses an ink jet printer.

Wotton et al (US Pat 6336722) discloses conductive heating of print media.

No (US Pat 5835106) discloses a printing system for sectional circular container.

Takanaka (US Pat 5764264) discloses an image forming apparatus having a movable separator for separating a recording medium from a feeding belt.

Kubo et al (US Pat 6074056) discloses an ink jet printer which securely holds a printing medium without contaminating a peripheral surface of a rotary drum.

Koumura et al (US Pat 4463361) discloses an ink jet recording apparatus with vacuum platen.

Uchida et al (US Pat 5225852) discloses a recording material transport device and recording apparatus having the same.

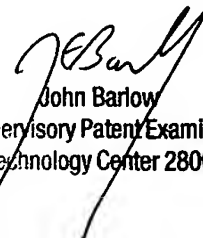
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S Liang whose telephone number is (703) 305-4754. The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

IsI

September 20, 2002


John Barlow
Supervisory Patent Examiner
Technology Center 2800